MARCH 1947

FIREMEN

FIFTY-FIRST YEAR • NATIONAL FIRE PROTECTION ASSOCIATION

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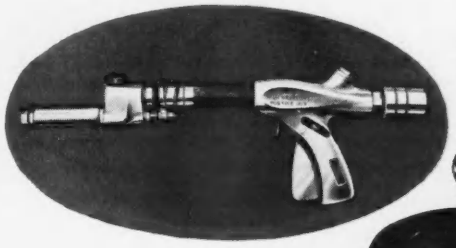

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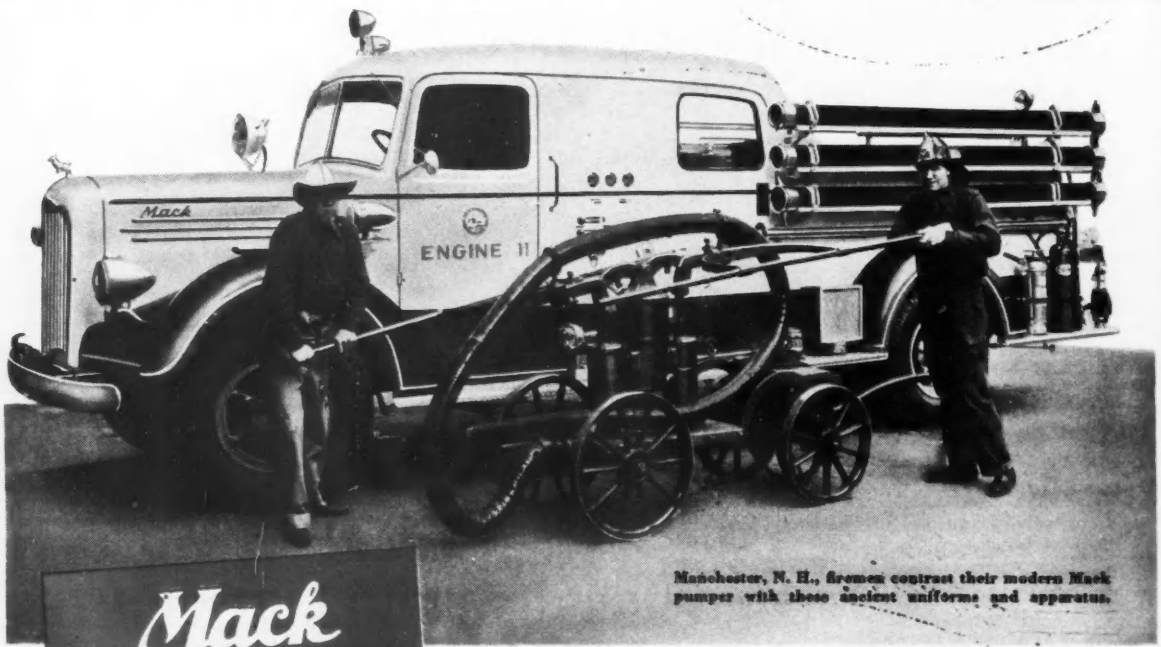

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Firemen

Volume 14 Number 3

WARREN Y. KIMBALL, EDITOR
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A VOLUNTARY NON-PROFIT ORGANIZATION

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FIRE FIGHTERS know that fires involving attic spaces of churches are most difficult to control. The blaze shown on the cover this month (*Press Association, Inc.*) damaged the Church of St. Mary of Sorrows in Buffalo, N. Y., on January 14. According to Chief Leo S. Considine, of the Buffalo Fire Prevention Bureau, the fire was believed due to a gasoline torch. The loss exceeded $210,000.

Firemen on arrival were confronted with a fire which had gained great headway in the attic of this beautiful church, which was 200 feet long and had a seating capacity of 1,700 persons. The slate roof was 85 feet high with a main tower 200 feet high. The cockloft was of two levels with ladders and catwalks available to workmen. There were no fire stops or partitions in the attic. Due to the elevation of the fire and a strong wind, flames were quickly beyond control of fire companies responding to three alarms. Hand lines taken to the roof over ladders could not cope with a fire of this magnitude and turret nozzles and ladder pipes were employed.

FROM time to time, members of volunteer fire companies in suburban communities are considerably irked by unfair comparison of their methods of brush and grass fire fighting with the techniques used by forest fire fighters in remote timberlands. Persons making such criticisms assume that, because the "one lick method" of fire line construction or the "Pulaski tool" are part of the repertoire of fire fighters in the tall timber, they would have equal application where flames sweeping through grass and brush threaten to envelope a hundred or more suburban residences simultaneously.

Such comparisons are odious and unfair because they are not representative of similar situations and problems. Like the Russians falling back 1500 miles from their frontier to Stalingrad, sacrificing land for time, the fire fighter in the great forest plans where to meet the flames at a time and place where terrain will be favorable to construction and holding of a fire line with available tools and labor. This may mean abandonment of considerable acreage not yet involved at the time of size up. As water supplies are extremely scarce, usually the line must be drawn where it may be held without advantage of hose streams.

The spring brush and woods fire danger in a suburban town or village presents a much more acute problem. Flames racing through grass and brush threaten at once to envelope a dozen homes. There is no ground to lose without sacrificing buildings, thus the enemy must be met on his own terms and terrain. This type of fight can be won only by volunteer fire fighters willing to come to close grips with the flames with water stream equipment. Most important is the water tank apparatus supplying mobile booster and forestry hose. These lines quickly advance along the fire front cutting off the head of the fire. Crews with back-pack pump tank extinguishers play a major roll in outflanking the fire.

Where danger is acute from flames sweeping toward a village, 2½-inch lines must be provided to make a stand. Pumper relays from ponds or other open water sources are often resorted to. Portable pumps supplying the smaller forestry hose also do yeoman service.

The fact that each spring when hot dry breezes fan flames against suburban communities, volunteer firemen triumph over potential conflagrations not once, but thousands of times, should silence critics who seem to feel that the slow back breaking methods of swatter, broom and shovel should supplant the speedy and successful work of the fireman and his hose.

DISPLACED persons" is a relatively new term which has been principally used to describe the millions of people, particularly in Europe, who were driven from their homes by war. John E. Woody, chief of the fire department in Austin, Texas, has used the term effectively and properly, we think, in his report of the 1946 fire department activities in that city. In 1946, the Austin Fire Department estimates that 115 persons were "displaced" as a result, principally, of 307 fires in dwellings, as compared to an estimated of 88 "displaced" due to 325 building fires in the previous year.

This is an effective "statistic." It points to one of the usually unmeasurable losses due to fire. Lives lost can be counted and property losses expressed in dollars, but it is less easy to dramatise the innumerable dislocations and confusions that follow in the wake of every fire.

Report of State-Wide Firemen's Training Activities

By WARREN Y. KIMBALL, Editor

MORE than 50,000 firemen received training under state-wide firemen's training programs during the training year ending June 30, 1946. It will be appreciated that this number does not include many thousands of firemen who receive regular training under the local programs of city fire departments, both large and small, which do not report to state agencies. During the period covered by this report, many of the state training programs were just getting under way after partial or complete interruption during the war period. A number of states have secured new fire training directors or new full-time state instructors. It is almost certain that the next training year will see the greatest activity of any of the past twenty-three years since the first state-wide training programs were inaugurated. Several states, following the lead of Maryland, are contemplating full-time firemen's training centers.

Early in the past fall, FIREMEN magazine sent a fire training questionaire, prepared with the assistance of W. A. Ross, chairman, NFPA Firemen's Training Committee, to the fire training directors of the various states. Detailed reports have been received from most of these officials to whom we are indebted for the excellent cooperation that makes this annual firemen's training survey possible. The highlights of each state's report have been summarized and appear in this issue of FIREMEN. The statistical data has been tabulated and also is included in the report.

One very interesting trend may be noted in the training figures for the past school year. Most of the states having organized firemen's training programs now are stressing systematic measured training courses. These are the courses in which complete units of training are measured on a basis of the number of hours of instruction given per subject and ability of the learner to perform satisfactorily the task in which instruction has been given. A total of 28,737 firemen completed one or more measured units of systematic instruction given during the year. Most of this instruction work was done by qualified fire training instructors working with local fire departments on their home-grounds. Frequently the training was done with local equipment. Regional and district fire schools gave systematic instruction to 5,576 fire fighters. Of the 7,290 men attending state fire schools and fire colleges, 3,125 received systematic unit training courses.

The popular promotional type of short course in firemanship given in many states to provide basic instruction and to create a desire for more thorough systematic training had 16,121 adherents. This included some 7,925 men reached by itinerant instructors going to local departments, 4,031 men attending regional short courses, and 4,165 men attending state fire schools or fire colleges where lectures and promotional type training was given.

Another interesting development was the increasing popularity of special training conferences for selected groups interested in individual problems. These included conferences on arson detection, airplane crash fire fighting, and a large number of special confer-

Systematic Measured Instruction

State	No. Persons Completing One or More Units	Average Hours Instruction per Person	No. Trained in Local Departments	No. Trained in State Schools	No. Trained in Regional Zone Schools
Alabama	1,095	156	1,001	94	0
Colorado	725	20	725	0	0
Connecticut	305	10	0	0	305
Delaware	303	24			303
Florida	50	40	0	50	0
Illinois	2,194	12	332	0	1,862
Indiana	1,958	6	945	0	1,013
Iowa	4,308	30	3,880	428	0
Kentucky	750	20	750	0	0
Maryland	710	67	710	0	0
Michigan	644	100	644	0	0
Mississippi	1,337	15	1,337	0	0
Nebraska	1,413	12	1,005	0	408
New Jersey	1,470	51	0	1,470	0
North Dakota	468	6	0	0	468
Oklahoma	221	41.6	221	50	0
Oregon	564	14	564	0	0
Pennsylvania	2,082	54 or 30	879	283	920
Tennessee	369	10	323	46	0
Utah	168	20	0	168	0
Virginia	314	30	314	0	0
Washington	7,082	4	5,946	536	600
West Virginia	212	54	212	0	0
Hawaii	248	20	248	0	0
Totals	29,040	—	20,036	3,125	5,879

Promotional Type of Short Firemen's Training Courses

State	No. Persons Attending	Average Hours per Fireman	Local Classes	District Schools	State Fire Schools
California	2,061	15	937	1,124	0
Connecticut	250		0	0	250
Georgia	953		327	47	579
Illinois	642	24			642
Indiana	509	12	0	0	509
Iowa	1,166	2	416	322	428
Kentucky	475	15	150	65	260
Michigan	511	30	215	0	296
Minnesota	400	20	0	0	400
Nebraska	1,494	6	299	973	222
North Dakota	1,500		0	1,500	0
Texas	6,025	3	5,581	0	444
West Virginia	135	20	0	0	135
Totals	16,121		7,925	4,031	4,165

ences for chief officers interested in special fire department administration and tactical matters. Also popular were industrial fire brigades personnel conferences, and training conferences for fire prevention workers. A total of more than 6,000 officers and men attended 164 of these special conferences showing that the training of leaders is not lagging behind the training for rank and file personnel.

The third major phase of firemen's training, the provision of experienced fire fighters schooled in teaching techniques, also showed marked advance. While not all states reported the number of qualified instructors available, fourteen states reported a total of 665 qualified instructors on the job, and eight states have plans for the addition of hundreds of additional instructors. Iowa and Nebraska each have a goal of 500 trained instructors, enough so that each department in the state will have at least one qualified instructor. Eight states reported instructor training programs of from 12 to 80 hours duration during the past year.

Recapitulation Reported Firemen's Training Fiscal Year Ending June 30, 1946

	Systematic	Promotional	Total
Local Schools....	20,036	7,925	27,961
Regional Schools.	5,879	4,031	9,607
State Schools....	3,125	4,165	7,290
Special Conferences			6,024
Total.....	29,040	16,121	50,882

ALABAMA. 1094 firemen completed one or more units of systematic instruction in the year, with an average of 156 hours instruction per person. Of these, 1,001 were trained in local fire departments and 93 received training at the state fire school, according to Associate Supervisor of Trades and Industrial Education Ben. E. Harris. Instruction was given by Battalion Chief W. M. Walton, state itinerant instructor, aided by experienced fire department drillmasters who have had instructor training. In addition, 18 public school custodians attended a 3-hour fire prevention conference at the University of Alabama. With money appropriated to the State Department of Education's Vocational Division and the University of Alabama, modern fire fighting equipment has been purchased and a fire training school building is being constructed. Plans call for a refresher course for old instructors and a regular course for new instructors as soon as the campus fire station is completed at the University of Alabama at Tuscaloosa.

ARIZONA. No firemen's training program was conducted in the past school year, and according to State Supervisor of Trade and Industrial Education Edwin C. Gracey, "It is doubtful that firemen training programs will be inaugurated this coming school year, unless the legislature supplies enough funds which are not applicable for matching purposes through local schools."

ARKANSAS. No state training program was in operation during the fiscal year ending June 30, 1946, but the Arkansas State Fire College under the supervision of J. C. Ruppert, of the Office of Trades and Industrial Education of the State Department of Education, was reactivitated August 1 after four years of inactivity. Chief John E. Hurley returned as state fire instructor. Seventeen regions were formed and a training program set up following the Oklahoma A. & M. textbooks. The very active program carried out since August 1 will be reported in the next fiscal year.

CALIFORNIA. Supervisor of Fire Training Thomas S. Ward reports that principal attention was given to the itinerant training program which is to be enlarged if present plans materialize. At present the staff is operating with one supervisor and two traveling instructors. Instructor training comes under the Teacher Training Division of the Education Department, but there are about 150 fire instructors who have completed the 30-hour

CONTINUED ON NEXT PAGE

NFPA Firemen's Training Committee at FDIC. This committee held sessions on January 5-7 at Memphis, during which 15 of the 19 members attending sat for the above photograph.

Front row, Vice-Chariman J. W. Just, director, Fire Service Extension, Maryland; Secretary Emmett T. Cox, Fire Prevention Department of the Western Actuarial Bureau, Chicago; Chairman W. A. Ross, consultant, Public Service Occupations, U. S. Office of Education; Robert F. Hamm, director, Firemen's Training, Indiana Inspection Bureau, Indianapolis; and Harry K. Rogers, Fire Prevention Department, Western Actuarial Bureau.

Center row, R. J. Douglas, associate professor of fire protection, Oklahoma A & M College, Stillwater; NFPA Chief Engineer Horatio Bond; Professor H. R. Brayton, director, Fire School, A & M College of Texas, College Station; W. Fred Heisler, training consultant, Oklahoma A & M; and J. I. Fetters, assistant supervisor, Nebraska Department of Vocational Education, Lincoln.

Back row, T. S. Ward, supervisor, Fire Training, California Department of Education, Sacramento; Lieut. Harry Wolff, Chicago Fire Department (for Chief A. J. Mullaney); A. D. Des Roches, inspector, Ontario Fire Marshals' Department (for Fire Marshal W. J. Scott); Robert C. Byrus, director, Firemen's Training, Iowa State College, Ames; and Richard E. Vernor, manager, Fire Prevention Department, Western Actuarial Bureau.

At the meetings but not in the picture were Fred Shepperd, editorial director of "Fire Engineering," New York; Clarence Goldsmith, assistant chief engineer, NBFU, Chicago; Prof. L. H. Provine, director, Illinois Fire College, Urbana; and E. T. Stewart, chief engineer, Kansas Inspection Bureau, Topeka.

Fire Department Instructors' Conference, Memphis, January 7-10, 1947. The most important firemen's training meeting is the FDIC, a typical session of which is illustrated. The meeting had 45 program items, over 80 speakers or participants, and was attended by over 600 persons from 35 states, the District of Columbia, and the Province of Ontario. The 1947 meeting was the nineteenth Annual Conference, the thirteenth at Memphis. It is not a convention but an invitation sponsored jointly by the Fire Prevention Department of the Western Actuarial Bureau, Chicago, Richard E. Vernor, manager, and the Memphis Fire Department, Connie O'Sullivan, chief. Mr. Vernor, an NFPA last past president, was chairman of the conference.

training course. A total of 1,124 firemen received an average of 15 hours of instruction during the past fiscal year. Future plans envision a central, permanently located fire fighting school, the addition of more instructors to the state staff, and a permanent instructors' school.

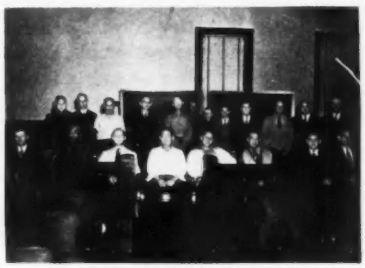
COLORADO. Chief Charles O. Bonnelle, State Fire Instructor, reports that 725 firemen received an average of 20 hours of systematic instruction during the past school year. This instruction was given by two regular state instructors assisted by 10 part-time professional firemen instructors who had received teacher training. Most classes were held monthly at local centers with all fire department members participating with their own equipment. About 50 special conferences on fire department administration problems were held with local fire officials. For the next year a series of one-day regional fire schools have been started.

FLORIDA. Assistant Chief J. R. Larrabee, of West Palm Beach, reports that 50 firemen completed 40 hours of systematic instruction during the annual state fire college. In addition, 15 chiefs attended a 3-hour officers' conference. Ten men were given a 40-hour course in fire instructor training put on by Mr. H. F. Hinton of the State Department of Education. It has been announced that Mr. James P. Britton, formerly fire prevention engineer for the Third Army, has been appointed permanent coordinator for the State Fire College.

GEORGIA. Fire Marshal Harry Phillips, Director of Fire College, reports considerable firemen training activity. Atlanta and other cities are conducting a 2-year course in firemanship for members of the military services in connection with the G.I. Bill of Rights. 125 men are taking this course. The State Fire College conducted two 3-day officers' courses on advanced fire fighting and fire prevention. Approximately 100 men attended each school. A total of 953 men took part in local, county, or state fire schools under instructors holding teacher certificates from the State Department of Education. The Atlanta Fire Department conducts a continucus training program for all officers and men. Sixty men were given a 36-hour course in instructor training. It is estimated that an additional 50 instructors are needed. The State Board of Education has appropriated $10,000 for fire department training in 1947. A full-time chief has been appointed to head the fire service training program. Qualified instructors will assist in conducting 10 zone schools and 2 courses in fire department training.

HAWAII. Chief Engineer H. A. Smith, of the Honolulu Fire Department, reports that in addition to the department's regular training program 248 firemen completed two days of training at the Navy Fire School at Pearl Harbor. Plans for a fire school and drill tower at Honolulu have been delayed by lack of finances.

ILLINOIS. State Fire Marshal John H. Craig reports that 25 regional schools were conducted during the past fiscal year with 1,862 firemen in attendance. In addition, the two staff instructors of the fire marshal's office gave instruction to 337 men in local fire departments. 176 cities were represented by 642 men at the 22nd Illinois Fire College. Instruction was given to 3,000 industrial fire brigades personnel. In addition, fire prevention demonstrations and lectures were given to 62,962 persons.



Indiana. A group of officer personnel at a state conference for fire department officers in Evansville last spring.

INDIANA. State fire instructors Robert F. Hamm, of the Indiana Inspection Bureau, and Francis Hartman, of Purdue University, gave systematic firemen's training to 945 members of local fire departments and to 1,013 firemen attending regional or district fire schools. In addition some 50 fire departments of the state have regular drillmasters giving purely local training. Three chief officers' conferences had an average duration of 11.5 hours with 47 officers in attendance. A 6-hour fire prevention conference was attended by 25 men. Twelve 3½-hour conferences for industrial fire brigades were attended by 254 men. The State Fire College at Purdue University was attended by 509 men who received an average of 12 hours instruction. Sixty-seven fire department instructors took a 12-hour course in aircraft fire fighting. The monthly *Bulletin* edited by the state fire instructors continued to be outstanding.

IOWA. Starting October 15, 1945, when Bob Byrus came to Iowa State College to head the fire training program, the state has had one of the most active firemen's training programs. An average of 30 hours of systematic operational instruction was given to 4,308 firemen by instructors receiving instructor training under a program acceptable to the State Board for Vocational Education. Of these 3,880 men were trained in local fire departments and 428 men were trained at the state school. Six chiefs' conferences were held with an average of 18 hours per conference and attendance of 104 officers. Best attendance was from paid chiefs, as it was found difficult to assemble the volunteer chiefs. Two-hour promotional type of short courses were given to 1,166 men including 416 men attending local schools, 322 men at district fire schools, and 428 men at the state fire college. The state has 125 qualified fire training instructors and 55 men completed the 30-hour instructor training. It is estimated that 500 more instructors are needed. Meetings of drillmasters of paid departments are held on a semi-annual basis and instructors of volunteer departments are assembled as conditions permit. It is planned to have additional instructors with their own fire apparatus to serve on an itinerant basis on individual departments or on a county regional school plan. Steps have been initiated to secure necessary financing.

KANSAS. Chief Engineer E. J. Stewart, of the Kansas Inspection Bureau, reports that due to government travel restrictions no state fire school was held in the past school year. However, a fire school was held in Wichita during the past fall and will be reported next year.

KENTUCKY. Captain V. A. Beam, Coordinator of Firemen's Training, reports a very busy year in

Special Conferences Held

State	Number of Conferences	Average Hours	Number Attending	Type of Conference
Alabama	1	3	18	School custodians
California	1	30	14	Chief officers'
Colorado	50		100	Officers
Connecticut	12	3	15	Fire dept. instructors
Florida	1	3	15	Chiefs
Georgia	2	20	200	Officers
Illinois			3,000	Industrial
Indiana	16	3 to 11	326	Officers, fire prevention industrial
Iowa	6	18	104	Chiefs
Kentucky	2	1	185	Industrial
	4	5	39	Chiefs
Massachusetts	12	4	20	Fire dept. instructors
Michigan	6	2	930	Chiefs
	10	2	86	Industrial
Nebraska	8	3	31	Chiefs
	3	20	90	Fire prevention
	1	2	50	Industrial
New Jersey	6	51	270	Fire prevention, industrial
North Dakota	3	4½	8	Chiefs
	1	3	5	Fire Prevention
Oklahoma	6	6	81	Officers
Tennessee	1	2	17	Industrial
Washington	8	16	385	Chiefs
	4	12	35	Industrial
Totals	164		6,024	

Report on Instructor Training

State	Qualified Instructors Available	Additional Instructors Needed	Men Given Instructor Training During Year	Length of Course in Hours
California	150	—	0	30
Colorado	20	—	0	30
Connecticut	15	—	0	0
Delaware	—	—	—	30
Florida	10	50	10	40
Georgia	25	50	60	36
Indiana	—	—	67	12
Iowa	125	500	55	30
Kentucky	24	12	0	0
Maryland	125	—	0	0
Michigan	80	50	42	20
Nebraska	—	500	0	0
North Dakota	25	10	32	25
Oregon	10	—	0	0
Tennessee	20	100	10	30
Virginia	20	—	0	0
Washington	16	0	10	80
Total	665			

which 750 men received an average of 20 hours regular, elementary, or basic training with special classes in aerial truck and pumper operations. In addition, 475 men received an average of 15 hours of promotional type training. Of these, 260 attended the state fire school, 65 attended a district school, and 150 were reached in local departments by the state coordinator and his assistant. Four officers' conferences averaged 5 hours each with 39 chiefs in attendance. Two conferences were held for industrial fire brigades personnel with 185 in attendance. Systematic training is beginning January, 1947, with qualified men from paid departments serving as part-time district instructors to assist Captain Beam and Captain J. E. Berryman of Lexington, the new assistant state instructor. Each district of the state has been called into general conference to prepare for unit training courses by the vocational area schools. An annual school for instructors is to be held at the University of Kentucky and it is hoped to add 12 additional part-time instructors. Plans have been approved by the Supervisor of Trade and Industrial Education but are held up by the appropriation of funds which, however, have been approved by the Director of Vocational Education.

MAINE. There were no training programs in the state during the past school year. A projected program for Aroostook County was never carried out.

MARYLAND. Chief James Just, Director of Fire Service Extension, University of Maryland, reports that 710 men completed one of the systematic training courses during the past school year. These courses consist of Section I, 75 hours; Section II, 57 hours; and Section III, 69 hours. There are approximately 26,000 volunteer firemen in the state and 125 qualified instructors are available in addition to the full-time fire college personnel. In addition, instruction was given to classes in Oregon, Minnesota, Illinois and Virginia, through the college's fire extension course. During the past year,

Maryland's new $164,000 Fire Service Building, dedicated September 28, 1946.

construction was started on the new fire service center at the University of Maryland. It is planned in the future to have teacher training courses each year with outside work at the Fire Service Building which is now in service.

MICHIGAN. Supervisor of Public Service Training M. D. Whale reports a busy year which unfortunately saw the passing of beloved Chief Edward C. Rumsey, of Detroit, who was serving as itinerant fire instructor. An average of 100 hours of systematic instruction was given to 644 firemen in local departments using paid fire department instructors who have had instructor training. Six 2-hour chief officers' conferences were held by Chief Rumsey with 930 officers. A one-day conference of Michigan fire chiefs was held under the leadership of Mr. W. A. Ross, Consultant, Public Service Occupations, U. S. Office of Education, with 45 chiefs in attendance. Ten 2-hour conferences were held for 86 industrial fire brigades personnel. Promotional short courses were given to 215 firemen on a local basis and to 296 men attending the state fire college. The state has 80 qualified instructors and an additional 50 instructors are needed. A 20-hour instructor training conference held at Ann Arbor in March, 1946, qualified 42 men. Instructors' conferences are held on an annual basis. Beginning October 1, 1946, through the cooperation of the Extension Service of the University of Michigan, Battalion Chief Wallace F. Gannon of Muskegon has been obtained as instructor for small and volunteer fire departments of the state.

MINNESOTA. Some 400 firemen attended the 18th annual Northwest Fire School at St. Paul, May 13–15.

MISSISSIPPI. State Supervisor of Trade and Industrial Education reports that 1,337 firemen received an average of 15 hours of systematic instruction in local fire station classes conducted by experienced fire fighters.

NEBRASKA. Chief J. I. Fetters, State Supervisor of Fire Training, reports extensive activity for the past year. Chief Fetters with his itinerant instructor gave systematic training to 1,413 firemen. Of these, 1,005 completed the systematic circuit fire training school covering six 2½- to 3-hour lessons on some 15 phases of fire fighting evolutions and practices. The others were trained in regional schools. Eight chiefs' conferences, averaging 3 hours each, were attended by 31 officers. Three 2-hour conferences for fire prevention personnel were attended by 90 men. A 2-hour in-

5th Annual Tri-State Firemen's Meeting at Wallum Lake, Mass., September 22, included a helicopter demonstration. Firemen from Connecticut, Massachusetts and Rhode Island attended.

dustrial fire brigades program reached 50 men. Fifteen conferences on Assisting Municipal Governments in Securing Fire Protective Equipment each were attended by an average of 10 city and fire department officials. Promotional short courses reached 299 men in local fire schools, 973 men in regional fire schools and 22 men at the state fire school at Grand Island, with an average of 6 hours instruction per man. A teacher training program is soon to be inaugurated. This is designed to qualify approximately 500 men or at least one instructor for each fire department. In addition, regional chief officer refresher courses are planned consisting of at least 5 meetings in 20 districts of the state. These will deal with fire department administration and fire fighting tactics. A technical fire training school covering refrigeration, fumigation, ventilation, flammable liquids, and liquified petroleum gases is to be conducted at Omaha, available to the entire fire service of the state. In addition to strictly fire department training, the state instructors gave numerous fire prevention lectures and demonstrations, fire extinguishment demonstrations, and conducted rural fire protection conferences reaching 15,889 students and 5,651 adults.

NEVADA. State Director for Vocational Education Donald C. Cameron, reports that the fire training program discontinued four years ago was resumed during the past year with an itinerant instructor giving training to 199 firemen in their local departments. The plan followed gives a week of training in each department with 10 to 12 hours of class instruction. It is hoped in the near future to add provisions for instructor training for fire chiefs to help them carry on training in their own departments.

NEW JERSEY. A fire safety college was held in Newark last spring with various fire service organ-

New Jersey Fire Safety College demonstration. L. to r.: George W. Yemm, chairman, Industrial Committee, Newark Safety Council; W. R. Smith, chairman, council's Fire Prevention Committee; R. W. Black, chief safety engineer, Standard Oil Co. of N. J.; Leonard Fuchs, chairman, council's Fire College Committee; and S. C. Williams, Jr., member of council's Fire College Committee.

izations and the Newark Safety Council as sponsors. Total enrollment was 1,487 with 587 graduates. Attendance was 65 percent volunteer firemen, 10 percent paid firemen, and 25 percent industrial fire brigade members.

NEW YORK. This great state has, as yet, been unable to formulate an effective state-wide firemen's training plan as urged by the New York State Fire Chiefs' Association and the New York State Firemen's Association. An executive Division of Safety was authorized under 1946 legislation approved by Governor Dewey. One feature of this was to provide for training of firemen. As yet there has been no notice of appointments to carry out a firemen's training program. Nassau and Suffolk counties on Long Island have extensive firemen's training programs for their volunteer fire companies, with full-time instructors in part supported by Federal vocational education funds. Several regional and local fire schools were carried out under the direction of interested fire chiefs but none of these were in the nature of a systematic state-wide training program.

The annual convention of the Firemen's Association of the State of New York, meeting at Riverhead last August, passed the following resolution: "RESOLVED, That the New York State Firemen's Association in convention assembled at Riverhead reaffirm the position taken in the 1944 Convention requesting the establishment of a volunteer firemen's training program for the volunteer firemen of the state under the Department of Education."

NORTH DAKOTA. This state has only 80 paid firemen but 8,900 volunteer firemen. State Coordinator of Trades Education William J. Du Vall reports a very comprehensive training program for the past school year. For training purposes the state is divided into three regions and two schools were operated in each region with 468 firemen averaging 6 hours of systematic instruction. In addition, 1,500 other firemen attended the regional schools as representatives of local departments. Three officers of the North Dakota Firemen's Association are supervisors of the regional fire schools and part of each meeting is devoted to firemen's training. Four conferences were held by chiefs and fire prevention personnel. The state has 25 qualified instructors available. Thirty-two men were given 25 hours of instructor training during the year. Supervisor Roy Johnston of the Eastern Regional Fire Schools attended a conference at Oklahoma A & M College on revision of fire fighting manuals.

OHIO. The Second Short Course on Fire Administration was held at Ohio State University at Columbus, September 9–14, 1946. Attendance figures will be included in the report for the next fiscal year.

CONTINUED ON PAGE 18

President Truman Calls Fire Prevention Conference

PRESIDENT HARRY S TRUMAN has called a Conference on Fire Prevention "to bring the ever-present danger from fire to the attention of all our people and to devise additional methods to intensify the work of fire prevention in every community in the nation." In calling the conference, the President said, "Serious losses in life and property resulting annually from fires cause me deep concern. I am sure that such unnecessary waste can be reduced. Substantial progress made in the science of fire prevention and fire protection in this country during the past 40 years convinces me that the means are available for eliminating this unnecessary destruction."

The President has appointed Major General Philip B. Fleming, administrator, Federal Works Agency, to serve as chairman of the conference, scheduled for May 6–8 in the Interdepartmental Auditorium, Washington, D. C.

General Fleming has appointed W. E. Reynolds, of the Federal Buildings Administration and chairman of the Federal Fire Council, as chairman of the coordinating committee for the conference.

Six conference committees are to be appointed and will present reports to the conference. They are: Building Construction Operation and Protection, Fire Prevention Education, the Fire Services, Laws and Law Enforcement, Organized Public Support, and Research.

The Co-Ordinating Committee of the President's Conference on Fire Prevention, at the White House, January 28. Top row, left to right, Ned H. Dearborn, president, National Safety Council; Guy T. Warfield, Jr., president, National Association of Insurance Agents; Lewis A. Vincent, National Board of Fire Underwriters; Hubert R. Gallagher, associate director, Council of State Government; Robert E. Dineen, president, National Association of Insurance Commissioners; A. V. Gruhn, general manager, American Mutual Alliance; Ernest B. Brown, Associated Reciprocal Exchanges; Frank M. Whiston, president, National Association of Building Owners and Managers; Commissioner W. E. Reynolds ,Public Buildings Administration, committee chairman; W. E. Mallalieu, general manager, National Board of Fire Underwriters; H. E. Hilton, Chamber of Commerce of the United States; James R. Edmunds, Jr., president, American Institute of Architects; Paul V. Betters, executive secretary, United States Conference of Mayors; A. Bruce Bielaski, assistant manager, National Board of Fire Underwriters and executive director of the conference.

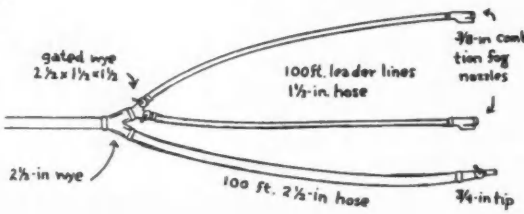
Front row, left to right, Earl D. Mallery, executive director, The American Municipal Association; Charles A. Delaney, president, International Association of Fire Chiefs; James H. Mooney, president, Building Officials' Conference of America; R. E. Wilson, Associated Factory Mutual Insurance Companies; Hal Colling, managing-secretary, Pacific Coast Building Officials' Conference; George J. Richardson, International Association of Fire Fighters; Frank A. Christensen, president, National Board of Fire Underwriters; James L. Madden, vice-president, Metropolitan Life Insurance Co.; Hovey T. Freeman, president, Manufacturers Mutual Fire Insurance Co.; Percy Bugbee, general manager, National Fire Protection Association.

The President of the United States.

Tank Apparatus Checks California Blaze

AN interesting example of the control of a major fire with water tank apparatus is reported from Kern County, Calif., where fire damaged a service garage and repair shop of the Shell Oil Company in Bakersfield. A night watchman first saw the fire in the rafters near an overhead gas heater in the center of the building. The night watchman apparently had not been drilled enough in procedure for turning in an alarm and tried to notify his superintendent before the fire department.

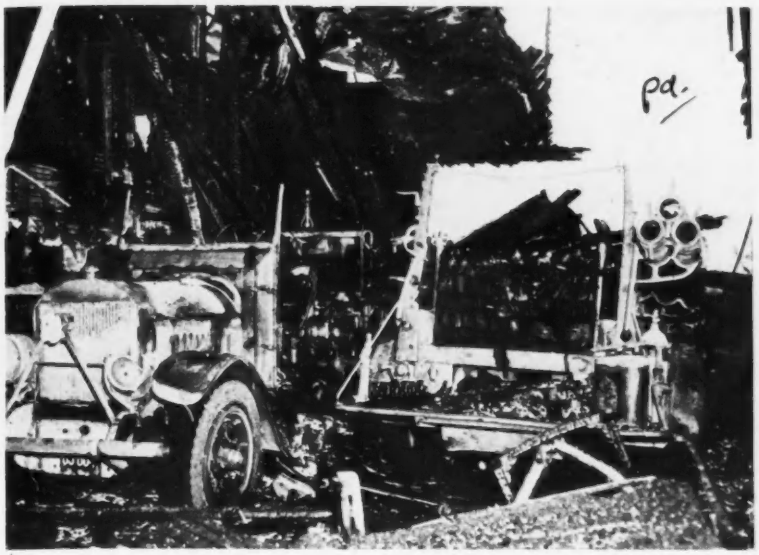
Upon the arrival of the fire department, the entire structure with an area of 10,175 square feet was involved in fire. According to District Chief Kenneth R. Cresswell, in command at the fire, response was made by four pumpers equipped with 500 gpm centrifugal pumps and carrying 350, 500, 500, and 2,350 gallons of water. Four 1½-inch lines were laid immediately from water tank apparatus; one from each 500-gallon tank and two from the 2,350-gallon tank. These 1½-inch lines were equipped with fog nozzles, having ⅜-inch tips for straight stream. These lines were able to keep in almost continuous operation until the fire was under control, as there was an adequate supply of water within one mile of the scene of the fire. Lines from the two 500-gallon tanks were connected to the 2,350-gallon tank while the trip was made for more water.



One 2½-inch line was laid by the pumper (which carried only 350 gallons of water) to an available hydrant capable of discharging only 125 gpm. The drop-off consisted of a 2½-inch wye, 100 feet of 2½-inch hose with a ¾-inch tip, a gated 2½-inch to 1½-inch wye and two 1½-inch lines 100 feet long with ⅜-inch tips (combination fog). As available water would not supply the three lines, the 2½-inch line was used until the fire was knocked down and the 1½-inch lines were used for mop up.

In addition to the pumpers, Battalion Chief R. E. Dodson responded with a pickup containing 110 gallons of water and equipped with a power take-off pump. This truck was used to pull two trucks and two cars from the garage involved in the fire.

Damage was held to $57,200 out of $90,000 value involved. Company records kept in filing cabinets were destroyed.



Acme

Notice the combustible wood lath walls of the Elsemere, Del., firehouse. There was need of some sort of thermostatic alarm, because the fire apparently had a good start before a passerby discovered it. FIREMEN readers might question the position of the apparatus, one truck facing in, the other, out.

Is Your Fire Station Next?

THE fire station is one occupancy that should have no excuse to burn. Fire protection headquarters for the community as it is, the fire station should be so constructed and, if serving volunteer companies, equipped with fire protection and alarm devices to be inviolable to fire.

Nevertheless, firehouses do burn (see FIREMEN, June 1946, page 16). In the past winter during a two-month period, at least six fire stations were destroyed by fires, several of which put apparatus out of commission and burned thousands of feet of hose. In most cases, the fires started and burned undetected until a passerby noticed that something was wrong and notified the authorities.

Monroeville, Ohio, lost its fire station in a fire on December 2, along with the post office, village council rooms, the township trustee office, and library, all of which were in the same 2-story brick building. The fire started about eleven in the morning in a first floor central storage room and was not noticed until it broke through into occupied rooms. There were no automatic sprinklers or automatic alarms. A $35,000 loss is a large replacement cost for a small town to bear.

Acme

Spectators gather to look at the wreckage after an explosion partially destroyed a Detroit fire station, January 16.

In Westwood, Mass., at eight minutes after midnight, December 3, the central fire station was destroyed by a fire discovered by a passing motorist. An oil burner explosion apparently caused the fire. The station was an old frame 2-door house. The replacement cost of station and equipment has been estimated at $75,000.

Fortunately no lives were lost in these two fires, but two firemen and a truck driver were killed and eight injured when an explosion occurred in the basement of a Detroit, Mich., fire station on January 16. Officials believed that the explosion was caused by fumes

Continued on page 22

Ten dwellings and the fire station were burned in Girardville, Pa., on January 22, in an early morning fire that caused damage estimated at $300,000.

When the Eureka Fire Co. firehouse, Rockville Centre, L. I., burned on January 23, the Live Oak Engine Company next door was in danger of burning, too.

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The first part of Chief Just's article, entitled "What a Fireman Should and Shouldn't Know about Insurance Rates and Underwriters' Gradings," appeared in the February issue of FIREMEN. This month Chief Just considers what a fireman should and shouldn't know

About Insurance Rates and Underwriters' Label Service

By Chief J. W. Just
Director, Fire Service Extension, University of Maryland

LET'S take a brief look at the matter of insurance rates on the individual mercantile or industrial property. Individual building rates are made from an extremely complicated rating schedule. This schedule is, however, the fairest and most scientific yardstick in existence for the measurement of relative fire hazard.

Contrary to the town grading methods, the building rating schedule starts from the ideal and applies charges for deficiencies and credits for protection. Incidentally, the only fireproof structure is considered to be a concrete structure, without doors or windows and with no contents, resting on the ocean bottom.

The Rating Bureau Engineer starts with a basic rate, predicated upon the classification of the town. He then establishes the classification of the building, whether fire-resistive, brick-joisted, mill construction, or frame. In an old building of mixed construction, this requires a considerable amount of complicated figuring to arrive at the exact proportions of the various types of construction involved. If an industrial plant, he establishes the various fire divisions, if there are more than one. A charge is then made for the nature of the occupancy. Floor areas of all buildings are also computed and possible charges made for excessively large areas.

Foundations, walls, floors, and roofs are considered along with the nature of wall and floor openings, and charges applied where required. Charges are made covering many devices of a special hazard nature, such as furnaces, kettles, processes, etc. Combustibility of building and contents is considered.

Possible damageability from adjacent falling walls is studied as well as any unusual features of construction or occupancy.

Then comes the matter of exposure charges from adjacent properties. It stands to reason that a general store should take a higher rate if located only twenty feet from a flour mill, than if it were twenty feet from a small brick bank building. The figuring of exposures is probably the most scientific and complicated part of fire insurance rating. One building exposing another diagonally — an angular exposure — is not as severe a hazard as if it were a broadside exposure. Even it if were 100 feet from a flour mill, but there was a smaller building between it and the risk being rated, that risk should still be charged something for the flour mill exposure, carried through the middle building — transmitted exposure.

It is entirely possible for a large, hazardous property in the center of a block to transmit exposure charges to every building in the block.

It should be clear, also, that as the distance between a building and exposing property increases, the exposure charge must decrease until it finally reaches a vanishing point. This distance to the point where exposure ceases to carry is largely dependent upon the size, as well as the construction and occupancy, of the exposing building.

There are also certain "after charges" that can be applied at the discretion of the rating engineer. A few of the items so covered are defective electrical wiring and appliances, dangerous gas connections, storage of hazardous or objectionable materials, fixed ammunition, highly volatile substances, storage of acids, bad housekeeping and so on.

Credits are allowed for fire protection such as automatic sprinklers, extinguishers, fireproofing, and watchmen.

That is a brief but descriptive picture of the complicated structure of fire insurance rating, as well as that of town classification. Let us see what conclusions the fireman should draw.

1. That the entire rate-making operation is a scientifically worked out procedure for the fair and adequate measurement of relative fire hazard.

2. That insurance rates are largely determined by the community and the individual property owner.

3. That considering all the ramifications and complications of rating, the less the average fireman says about the subject the better.

4. That the fireman should realize in a general way the many and complicated factors entering into both town classification and rating in order to understand better the need for consulting the underwriters before locating and building fire stations, buying apparatus and equipment, reducing personnel, recommending water mains, and so on.

How can a fireman get into trouble about rates? There have been instances where a fire department inspector has found out that certain charges had been made for a certain hazard. He advised the owner that if he would eliminate the hazard, it would "reduce his rate" by that much. The thing the fireman did *not* know, however, was that *other changes*, either structural or in occupancy, or in ex-

posing property, had been made *since the last rate was made.* Upon the fireman's advice, the owner eliminated the specific hazard and asked for a new rating. Result: His rate went *up,* due to the other changes that more than offset the fireman's pet hazard.

It should be realized that when a new rate is made, it is necessary to also re-rate all exposed buildings. This might entail the re-rating of an entire block. It will also be seen that it would be possible for such action on the part of the inspector to result in an increase of rates on every building in the block.

Moral: It definitely is not safe for the fireman to discuss insurance rates with the property owner.

There have also been instances where firemen have enthusiastically campaigned for additional apparatus or manpower, using the argument that such acquisitions would "reduce insurance rates." Obviously, from what you have learned of the deficiency point method of classification, with the fire department only accounting for 1500 points at its best, if a city is over into its present class by only a few points to spare, the fire department might not be able to change it, no matter what they did. If the water supply had gone bad, for instance, at about that time, the classification might drop to a lower one in spite of anything the fire department may have done. A request for reclassification solely on the basis of something the fire department has done, without first investigating all other conditions that enter into the classification may produce results directly the opposite to those expected or desired.

Moral: Before making any changes in your fire department — and positively before making any statements about classification or rates, consult the rating bureau having jurisdiction and be governed by their advice.

UNDERWRITERS' LABORATORIES, Inc., is a non-profit institution owned and operated by the insurance companies. Their job is to test fire protection and safety devices and develop standards for fire protection and other safety equipment. The Underwriters' Laboratories label does not necessarily mean the product is the "best you can buy," but it does mean that —

(1) The manufacturer has submitted the device to the laboratories for test.

(2) That it has been found structurally and mechanically sound.

(3) That it will adequately serve the purpose for which it was intended.

What of a similar device that is not labeled? One of several things, either—

(1) That the manufacturer has never heard of Underwriters' Laboratories — which is extremely doubtful and we wouldn't believe it anyway.

(2) That he is afraid to submit the device for unbiased test for fear it will fail.

(3) He *knows* it is a poor product to begin with.

(4) He has been grossly misinformed about the laboratories.

Salesmen of unlabeled products have stated that the *cost* of laboratory service was prohibitive. That is a deliberate misstatement.

Salesmen have advanced the argument that "we don't need the label, we can sell our product without it." That, unfortunately, is all too true. Many people are not familiar with Underwriters' Laboratories and will buy a device wholly upon the strength of a clever demonstration. Believe it or not, we have seen many fire chiefs do it!

It should also be borne in mind that even a labeled device can be abused, or used for purposes for which it was never intended, and thus fail to do a job. Of one thing you can be reasonably sure, however, and that is that the *labeled* device has a far better chance of coming through under such conditions than the device that is of questionable value from the beginning.

Some salesmen say that you can "buy" laboratory approval if you know how. Rest assured that no one *knows how!* Never overlook the pertinent fact that Underwriters' Laboratories are owned and operated *by* the insurance companies — and that the insurance companies are in many cases allowing insurance credits for the use of approved devices. *They* have a definite and tangible dollars-and-cents stake in the sure operation of such labeled devices.

Many devices tested and approved by Underwriters' Laboratories do *not* carry a label — some are too small, for instance. They do publish at frequent intervals lists of "approved devices." No fire chief's office is adequately equipped unless he has on file all such lists. It costs nothing to get on the mailing list for such materials and they should be on hand for ready reference.

The fireman-inspector should understand that in making an inspection the mere presence of the label does not mean that there is no need for checking or testing such a device. We have seen labeled devices that would not work, due to conditions imposed upon them that were outside the knowledge of the Laboratories.

It was stated earlier that the label does not necessarily mean that particular device is the best you can buy. Certainly there is nothing to prevent someone making a better one. *But* the fireman should demand the label.

If the new article is as good or better, the manufacturer can have it labeled. If it is not labeled, we would want a good excuse for its not being labeled — and we have never heard any "good excuse" in thirty-three years in the fire protection field.

Underwriters' Laboratories is maintained for *your* protection, for the protection of the individual who is conscientiously trying to protect his property, for the manufacturer, and for the protection of the insurance companies who are granting rate credits for fire protection equipment. Therefore, fire departments can conscientiously adhere to a rigid policy of never recommending other than Laboratories approved devices and should never permit the department name to be used in promoting the sales of unapproved devices, either by open endorsement or by purchase. For instance, a certain type of unapproved glass grenade so-called fire extinguisher has been purchased by some fire chiefs, either as the result of a clever demonstration or because the chief really felt he could use them under infrequent conditions. Whatever the purchase motive, however, the manufacturers have been quick to use the fire department purchase as "proof" to John Citizen that the device must be good. The fact of the matter is that John Citizen has a perfect right to rely upon the judgment of the fire department in such matters — and it behooves the department to be sure that his confidence is not misplaced.

Finally the Laboratories is an unbiased service organization that stands ready to help the fire service solve its problems. They can provide the answers for many of your questions, so why not use that service when in doubt about fire protection equipment and devices. We know from years of experience that you will find them fully cooperative.

Press Association, Inc.

Father Flanagan's Boys Town, Nebraska, nearly lost its original building when a fire broke out in the attic of the 5-story brick structure on January 3. A short circuit apparently caused the fire which fed on wood interior construction and destroyed the attic and fifteen floors. A $100,000 loss occurred. Eight fire trucks from Omaha came 10 miles and helped Chief E. P. Melia, of Boys Town, save the building.

One of the year's big fires destroyed the New York Central Railroad's Pier 3, Weehawken, N. J., January 8, at an estimated loss of $6,000,000. Very little information is available as to the cause of this fire. Three fireboats and 21 tugs fought to save the 64-year-old plank and timber pier. Land apparatus was hampered by the difficulty of approach to the pier because of the network of railroad tracks around and into the pier.

Acme

A soy bean mill and cotton seed oil warehouse of the West Tennessee Soya Mill, in Tiptonville, Tenn., were totally destroyed in a $720,000 fire on January 5. The fire was discovered in the soy bean mill building by the watchman at 4:10 a.m. just after he had made one of his hourly rounds of the one-story, frame and skeleton-iron clad plant. After rapidly consuming the mill, flames flashed to the bean and seed warehouse fifty feet north of the mill. Fire fighters devoted their efforts toward saving exposed seed tanks and the cotton seed mill. Factors in the rapid advance of this fire were the large undivided frame areas and combustible contents of the mill and warehouse.

A few hours prior, firemen had battled flames that did $50,000 worth of damage to the W. C. Haynes Lumber Company in Tiptonville.

An oil cook stove exploded in the first floor newsroom of the Charleston, S. C., Union Station at 11:34 a.m., on January 10. Flames spread to magazines and newspapers in the room and then on to involve the entire station, causing a loss unofficially estimated at $168,000. The 40-year-old station was built of brick, with floors of wood joist construction. The fact that it was an open building, resulting in tremendous drafts, accounted for the rapid spread of fire.

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Manual Fire Alarm Service: Summons fire department direct to the premises. Also sounds local alarms when desired.

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Holdup Alarm Service: Provides facilities for silent signals to summon police without knowledge of intruders, in holdups or other emergencies.

PATROL SUPERVISION FOR WATCHMEN AND GUARDS

Watchman's Reporting Service: Provides continuous supervision over watchmen to insure continuous patrols; investigation of any failure to signal and hastens appropriate aid in emergencies.

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* * *

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Taking suction from the backyard cistern.

Dwelling Fire Fought without Hydrants

THIS Christmas Day fire in Verona, Pa., was raging in an upstairs room when the Rosedale Volunteer Fire Department (NFPA member) arrived in response to a noon alarm.

The nearest hydrant was over 1,500 feet from the house and the 2½-inch hose on the pumper would not reach that far. As a result, two other volunteer companies were called in to lay a 2½-inch line from the hydrant to back up the Rosedale ¾-inch booster line and 100 gallons of water carried on the truck.

While the booster line was in operation from a ladder through the second floor window, the pumper was operating from a cistern in the back yard.

A 1½-inch line was laid from the pumper into the house and upstairs to head off the fire which had just started to work into a second room.

The 100 gallons of water from the booster tank, plus the 1½-inch line from the cistern took care of the fire very nicely. Although the firemen eventually had the 2½-inch line to back up the smaller lines, the larger line wasn't necessary with the result that the water damage on the first floor was negligible.

This is just another indication that small lines and a limited water supply can efficiently take care of a great deal of fire if the water is used sparingly and with good judgment.

By Bill Ruble, in "This Week," March 10, 1946

Is Your Team Dressed for the Play?

WOULD the meanest of home towns send its local ball teams on the gridiron or diamond without each member clad for battle from cap or helmet to cleated shoe and resplendent in the colors of local pride? Americans take their sports seriously and the Lions and Rotary or the Grange have carnivals and fairs in order that the home team may look like winners even though every man is only scrub material.

Now look at the local volunteer fire department of the same town. Are the men's heads protected against injury like the football players? One man wears a battered felt, another a hunting cap, there's a stocking cap and the Navy watch cap. A couple of men wear fishermen's sou'westers. If there is anything needed to show that those men are *not* firemen, it is the sou'wester, which, while waterproof, has none of the other attributes required of a firemen's helmet, such as protection against falling plaster, glass and wires, heat shield, tool for breaking glass, company identification and other features. The helmet also has ear protectors for cold weather. Properly organized fire departments do not permit men inside of burning buildings without a helmet and an "outside fireman" is a term of scorn.

What other protective clothing does the town's fire fighting team wear? An experienced fire fighter knows that his fire coat must protect his body from extremes of both heat and cold almost simultaneously. The outer coat resists water, heat, cinders, and dirt; the detachable inner lining provides added heat insulation as needed. The overlapping front of the coat protects the chest against wind and pressure-driven water. Wrist protectors guard against cold and water.

What footwear does our fire fighter wear? Will an old pair of brown shoes or a pair of farm or hunting boots do for fighting your way over hot debris, broken glass, six or eight inches of water while carrying heavy tools or dragging hose? Warning! Don't try canvas shoes. The soles may be rubber, but your feet will burn or freeze. The firemen's boots are felt lined to guard against burns to calf or ankle and to keep feet warm. There are loops at the top of knee-length boots to assist quick use and provide handles for convenient carrying. With the bet-

ter boots, the soles are reinforced with metal to prevent foot punctures.

WITH volunteer fire fighters there is always the question of taking time to dress. Many volunteer companies keep a set of fire clothing for each man on the apparatus, but crucial time may be lost if men stop to dress after the truck arrives at the fire, as in the case of men coming in their own cars.

The best practice would appear to be to have, always ready at home for night use, one fire coat, plus a fireman's night "hitch" or "turnout" of water-proof trousers rolled down around a pair of short boots. In the car there should be a longer pair of daytime boots, another fire coat, and a fireman's helmet so that a man will be ready for response in his own car at any time. Each fire coat should be provided with handkerchief, wool mittens, matches and cigarettes. Other personal equipment may be desirable, and of course there should be a flashlight handy. The fire truck may carry a few spare outfits of boots, coats and helmets for men who may respond with the apparatus.

It is sometimes remarked by volunteers that they do not have time to put on fire clothing. This can only be true if the fire clothing is not conveniently at hand. Paid firemen turn out faster at night than in the daytime. One snap buckle secures the night turnout trousers, and snaps on the coat can be fastened en route.

When the fire fighter pushes into heat and smoke that others are not prepared to face, it is not courage and experience alone, nor a stronger constitution, but, like the football player, he is prepared for a rugged game by wearing protective clothing developed through generations of fire fighting.

Chief's Magic Saves Two Houses

THE quick thinking of Chief Letcher Martin of the fire department of Henderson, Ky., resulted in control of a rural fire involving two houses where the only water supply consisted of a 100-gallon booster tank on the apparatus. When firemen arrived, the roof of one house was burned off and the gable was burning on an exposed house. It was decided that by using a foam-making play-pipe carried on the apparatus, the 100 gallons of water could be multiplied to produce 1,500

Continued on page 21

FRESH, COOL AIR AT ALL TIMES! that's the Scott Air-Pak

SELF-CONTAINED BREATHING APPARATUS

That's just what every user of a Scott Air-Pak finds available every minute—*fresh*—*cool* air! Not oxygen. Not rebreathed air. Not air filtered thru chemicals.

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"THERE CAN BE NO COMPROMISE WITH QUALITY WHEN A LIFE IS AT STAKE"

FIREMENS' TRAINING ACTIVITIES

CONTINUED FROM PAGE 9

OKLAHOMA. The eyes of fire training leaders from coast to coast invariably watch Oklahoma for an effective pattern of fire training. Field Instructor George Orgain reports that 221 men in 16 local departments were given unit courses in various fire training subjects. Six officer conferences were held with 81 men attending. The following subjects were given in the short course at Oklahoma A & M College: Ventilation, 24 hours; Apparatus practices, 40 hours; Inspection, 40 hours; Fire fighting practices for company officers, 8 hours; and Induction training, 8 hours. In all, 50 men averaged 24 hours of instruction in these courses. Oklahoma A & M College has re-established its 2-year technical school for firemen under Chief R. J. Douglas. In July, a 3-day short course was held with emphasis on reaching departments which have been lax in training. In October, an instructor training course was held in Oklahoma City for 17 departments. The field instructor continues to have a full itinerary.

ONTARIO. Solicitor Charles W. Caskey, reporting for Provincial Fire Marshal W. R. Scott, indicated that two fire schools were conducted during the past fiscal year. The Provincial Fire School at the University of Toronto in May, 1946, had a registration of 146. The Regional Fire School at Fort William in June had a registration of 86. In addition, members of the staff of the fire marshal's office assisted in a number of training programs. It was estimated that 200 firemen received an average of 1½ hours of instruction.

OREGON. State Supervisor of Public Service Training Clem. C. Clarke reports that 564 men received an average of 24 hours of systematic training in the past year. In addition, training sessions of a promotional nature were held in connection with fire chiefs' and sectional firemen's association meetings. There are 10 qualified fire department instructors in the state although no instructor training classes were held during the year. It is planned to add a full-time itinerant instructor to assist the small fire organizations particularly in rural areas.

PENNSYLVANIA. Chief Edgar A. Spotz, Fire Service Training Adviser for the Public Service Institute, reports that in the fiscal year ending May 31 there were 37 local classes in the fundamentals of fire fighting and two classes in advanced fire fighting techniques. The fundamental course consists of eighteen 3-hour sessions and the advanced course consists of ten 3-hour sessions. A total of 879 men graduated from these courses. In addition, 1,162 men attended full-time or part-time the 1945 Annual Pennsylvania Fire School consisting of more than 40 hours of systematic instruction. In addition, four county fire schools and the Western Pennsylvania Firemen's Training Institute graduated 920 men. Plans are under way to develope a state firemen's training center at Lewistown.

QUEBEC. The Province of Quebec is considering development of a comprehensive training program during the current year. For a number of years representatives of the fire marshal's office have visited each department in the Province to assist in training and organizational problems.

RHODE ISLAND. No state-wide training program has been developed although a committee representing the various fire service organizations held several meetings to study the possibilities of obtaining systematic fire service training with the cooperation of state educational authorities.

SOUTH CAROLINA. Chief A. McC. Marsh of Columbia reports that money has been set aside for a drill tower and that a firemen's training school will be started when the structure is completed. Lack of materials has prevented an earlier start on the building.

SOUTH DAKOTA. No report was received on firemen's training activities.

TENNESSEE. Fire Service Training Instructor Homer S. Elkins reports that 369 men received an average of 10 hours systematic training in 33 classes during the year. Of these, 46 men attended the state fire school. The remainder trained in local classes. One industrial fire brigade training program was held for 17 men. It is estimated that there are 863 paid and 2,025 volunteer firemen in the state served by 20 qualified instructors. Ten men completed the 30-hour instructor training program during the year. Plans for the future include a modern drill tower of the latest design. The state fire service school program encourages each fire department to have a qualified instructor so that each department will be up to date on modern fire fighting techniques.

TEXAS. Col. H. R. Brayton, Director, Firemen's Training School, reports that 444 men completed 36 hours of training at the annual fire college. In addition, the field instructor covers the state in an official car. During the year 221 drill sessions were held with an average of 3 hours per session, and with 5,581 men participating. In addition the instructor spoke at 36 meetings and conferences. It is recognized that additional field instructors are needed to permit more time with the departments in the field, particularly those having a poor fire record.

UTAH. Battalion Chief Albert Thompson, of the Educational Committee of the Utah State Firemen's Association, reports that 168 men from 32 departments in Utah, Idaho, and Wyoming completed 20 hours of training in the 3-day course in Salt Lake City. The school was sponsored by the State Firemen's Association, aided by the State Board for Vocational Education, and the Salt Lake City Board of Education. The school operated in two groups with one group at the drill grounds while the other was in class session at a high school.

VERMONT. No state-wide firemen's training program was reported for the past school year.

VIRGINIA. Supervisor of Public Service Training Harold I. Baumes reports that itinerant instructors working in local departments gave an average of 30 hours systematic instruction to 314 firemen. In addition, some 20 instructors previously trained continued work with their own departments. An instructor training conference was scheduled for November 1946 in Richmond. A report has not yet been received on this conference.

WASHINGTON. Chief W. A. Groce, secretary of the State Association of Fire Chiefs, reports that 7,082 men received an average of 4 hours of systematic instruction during the past year. Of these, 536 attended state school, 600 attended regional schools, and 5,946 received training in local departments. Eight officer and fire prevention conferences were held with 385 men averaging 16 hours attendance and four 12-hour industrial fire brigade meetings were attended by 35 men. The state has 16 qualified instructors and 10 men completed an 80-hour course in instructor training during the past year. Group study conferences are held for instructors each 90 days. It is desired to employ another full-time instructor when finances permit.

WEST VIRGINIA. Instructor R. E. Hanna, Jr., School of Mines, West Virginia University, reports that 212 firemen completed 12 hours of systematic instruction in local fire departments during the past school year. In addition, 135 men completed 20 hours of instruction at the annual fire college held at Morgantown. The state reports no instructor training program for firemen.

WISCONSIN. Instructor George J. Staley, Fire Service Training Division, Wisconsin Schools of Vocational and Adult Education, reports that there was no fire school in 1946. Local classes have been held since September 1, with an attendance of approximately 250 firemen from 20 communities. The course of instruction consists of 3 groups, basic, advanced, and supplementary. The first group is being given at present and consists of ten 3-hour sessions.

WYOMING. State Director of Vocational Education Sam Hitchcock reports that while no firemen's training program was held last year it is planned to hold classes during the current year.

Pennsylvania's 8th Annual Fire School at Lewistown included practice in airplane fire extinguishment.

NINTH ANNUAL

PENNSYLVANIA FIRE SCHOOL

LEWISTOWN, PENNA.

JULY 28 - AUGUST 1, 1947

PLAN NOW TO ATTEND

Pennsylvania firemen will not have the excuse that they did not know in time the date of the 1947 fire school to be held at Lewistown, and very little excuse that they had a prior engagement. A printed advance notice has been sent to each fire company for posting on the company bulletin board as shown above.

★ ★ ★

Fire School Notices

Third Annual Arson Investigation and Detection School, April 22-25, Purdue University, Lafayette, Ind.

This course, conducted by the Indiana Fire Service Training Schools and the Public Safety Institute of Purdue, brings together specialists from the police and fire fields for study and discussion of the arson problem. It also serves to determine the responsibility of various agencies dealing with arson and point out practical methods to use in apprehending and convicting the arsonist.

For additional information, write: The Director, Arson Training Course, Public Safety Institute, Purdue University, Lafayette, Ind.

Twenty-third Annual Iowa Fire School, May 20–23, Marshalltown, Iowa.

For the first time, this school will not be held at Iowa State College because of the housing shortage. Details about the program will appear in the April issue of FIREMEN.

Laws Pertaining to Fires

THE Fire Service Extension Division of the University of Maryland under Chief J. W. Just has issued a revised edition of the Maryland *Laws Pertaining to Fires, Firemen, and Fire Departments.* This volume contains 299 pages of laws and other legal data compiled in cooperation with Dr. Horace E. Flack, director, Department of Legislative Reference, City Hall, Baltimore, Md. The various laws have been prepared as they apply to individual counties and as they apply to the state in general.

Is Your Back-Pack Pump Gummy?

AN EXCELLENT preventative for sore and aching arms and gummy back-pack plunger barrels was offered by Fire Control Assistant Davis of the Descanso District, Cleveland National Forest. By cleaning the plungers with solvent and then rubbing them with a bar of soap they do not become gummy or dirty and, during use, furnish their own lubricant.

—*From* **"Fire Control Notes,"** *published by U. S. Forest Service.*

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HERE'S YOUR *CHIEF* FIRE-FIGHTING Equipment!

Yes sir, chief of them all for putting out grass, rubbish, forest, roof, room, building and Class A fires! **INDIAN FIRE PUMPS** are famous for the fast way they go into action and win the praise of all who use them. Here's an example:

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How is your supply of **INDIAN FIRE PUMPS?** Do you have plenty? Order now. Catalog and price list will be sent on request. Write us today for full information.

Pump throws pressure stream 30 to 50 ft. or nozzle adjusts to spray or fog mist. 5 gal. tank carries slung on the back. Extra strong construction throughout.

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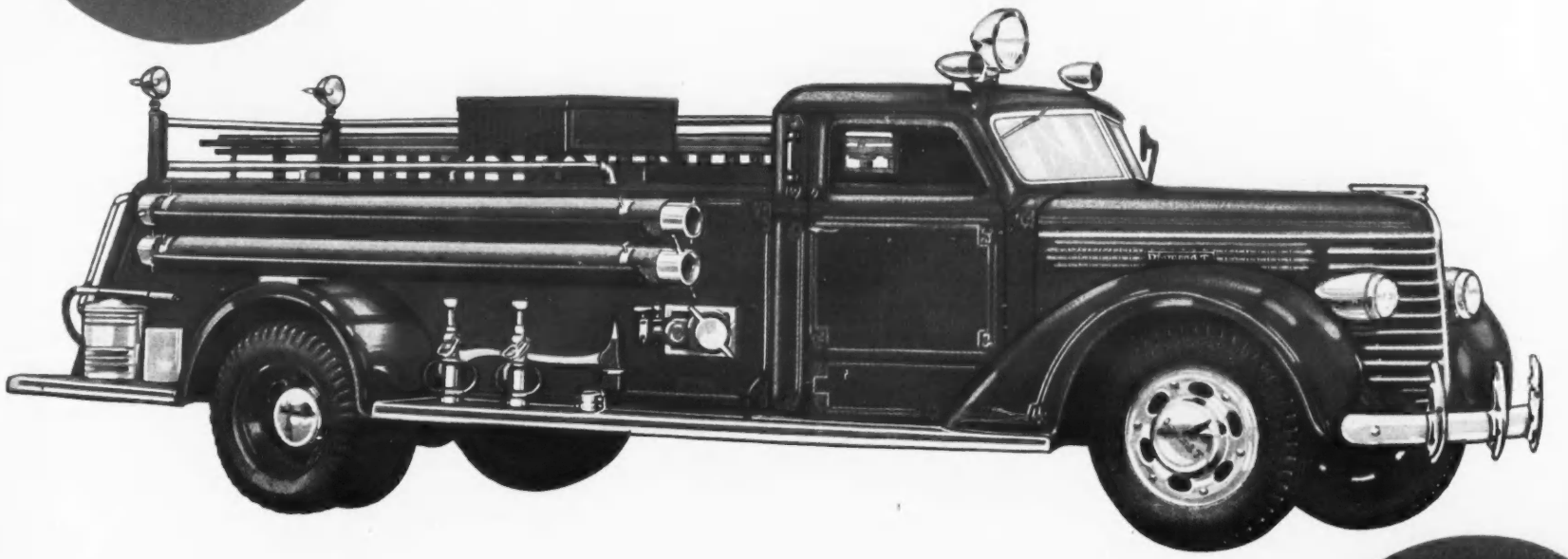

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PRESENTING THE CHAMPION LINE
A FIRE PUMP AND FIRE APPARATUS FOR EVERY SERVICE

Chief's Magic Saves Two Houses

Continued from page 17

gallons of foam. The fire department extinguished the fire in the gable and then completely sealed the upper section of the house with foam, extinguishing the fire there with water remaining in the booster tank.

This practice, while not yet common in the United States, has been widely adopted by the Paris, France, fire brigade and some other foreign fire organizations. In France, where public water supplies for fire fighting are much less generous than those provided in most American communities, a large proportion of all building fires are controlled with foam producing equipment.

Some American fire equipment designers see the day not far distant when built-in foam proportioners on the apparatus and foam nozzles will be provided on all American pumper and hose companies. This will not only multiply the booster tank capacity but will provide valuable extinguishing facilities for Class B (flammable liquids) fires such as gasoline tank trucks, airplane crash fires, and oil burner fires. Many types of gasoline fires that are difficult to control even with fog equipment yield to the smothering action of foam. Navy crash fire fighting equipment has demonstrated that mechanical foam can be successfully applied through specially designed fog nozzles providing at least part of the advantages of both types of application. While fog nozzles are particularly valuable in protecting occupants of wrecked planes or vehicles while awaiting rescue, the action of foam in blanketing and sealing off the fire, as well as preventing flashbacks, makes it a valuable ally for the modern fire fighter.

National Instruction Center for French Firemen

THROUGH the cooperation of leaders in French fire matters, a central fire school for members of French fire departments has been established in Paris. It was established in November by the Under Secretary of State for the Interior, the physical plant being provided by the Paris Fire Department. The school is supported by the responsible government dedepartments, by the National Federation of French Firemen, and *L'Oeuvre pour la Sécurité*, a national safety and fire prevention foundation.

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COTTON RUBBER LINED · Single or Double Jacket

You can rely on the long-established quality of Goodall Fire Hose to back you up **all the way** through your most stubborn firefighting jobs.

Jacket of tightly woven long fibre selected cotton provides exceptional resistance to snagging, punctures, and abrasive wear. Rubber lining is tough, durable, expertly "cured." Maximum flexibility and comparative lightness of weight assure easier handling and coiling. Sizes: Single Jacket, 1½" to 2½" — Double Jacket, 1½" to 3", in Municipal and Underwriters grades.

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...CLEARS THE WAY!

A BRILLIANT, roving blade of red light that stabs through the darkness giving instant warning to pedestrians and other traffic . . . and gives better protection to your own vehicle! In the daytime, this powerful beam of light flashes a warning to all, signalling that your vehicle is approaching.

Federal's Propello-Ray Light operates silently, without gears or similar complicated parts. All the moving parts are enclosed in streamlined chrome weatherproof housing to guarantee dependable, reliable service.

And for added protection, the efficient Propello-Ray Light is incorporated into three of Federal's fast-selling Traffiking sirens.

Get detailed information and prices on the complete line of Federal sirens. Write for bulletins today.

Model 67
an all-purpose siren for heavy duty, characterized by its deep tone.

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a double tone coaster siren that has a full two minute roll.

Model C-6
Federal's most powerful coaster siren, supreme in sound output and coasting.

(The siren and light are on separate circuits so that either signal will operate independently).

FEDERAL ELECTRIC COMPANY, Inc.
8717 S. State St. SIREN HEADQUARTERS Chicago 19, Ill.

Is Your Fire Station Next?

Continued from page 11

when an underground gasoline storage tank was being filled from a tank truck. The loss was $50,000.

Another small town lost its firehouse in a fire on December 18. The fire in the second floor recreation room of the Elsemere, Del., Volunteer Fire Company was discovered by a passerby who telephoned the alarm. A coal stove that had been heating the room may have caused the fire. Also, there had been a party in the room on the previous evening and a carelessly disposed of cigarette may have caused the fire. Both firehouse and equipment were destroyed in a loss estimated at $35,000. The fire was finally brought under control by firemen from Wilmington.

Two volunteer fire companies of Girardsville, Pa., lost their station in a fire which also destroyed ten dwellings. Fire discovered in a dwelling at 3 A.M., January 22, during zero weather, was carried along rooftops by a high wind. The fire siren was put out of service before an alarm was given but the apparatus was saved. Eight neighboring departments helped check the conflagration.

Latest in the epidemic of fire station fires was the blaze on January 23 in the station of the Eureka Fire Company, Rockville Centre, L. I., N. Y. A fireman, who was working across the street from the station, saw flames coming from second floor windows. Since all firemen in Rockville Centre carry a key that fits all the stations, he was able to dash across to unlock the doors and drive out the ladder truck. The blaze in the 2-story frame station was not extinguished until the building had burned beyond hope of repair.

W. A. Ross New Member of Board of Directors

W. A. ROSS, chairman of the NFPA Firemen's Training Committee and consultant in the U. S. Office of Education, has been appointed by the NFPA Board of Directors to fill the vacancy on the board caused by the death of L. T. Wheeler, late secretary-manager of Southeastern Underwriters' Association.

National Fire Protection Association, International

Associate Membership

VOLUNTEER FIRE COMPANY SECTION ($10 annual dues) Eligible:

(1) all bona fide volunteer fire organizations in any community.

(2) all fire departments and companies in communities of less than 25,000 population.

(3) all industrial fire brigades.

Member volunteer fire companies receive ten copies of FIREMEN magazine each month, mailed to the homes of individual firemen. Beyond the ten, additional copies of FIREMEN cost $1 per year.

Volunteer Fire Company Section members, receive, at their headquarters, one copy of all publications sent to NFPA associate members.

ASSOCIATE MEMBERSHIP ($10 annual dues) Eligible: Individual fire department officers, firemen, and others interested in fire safety. NFPA associate members in the fire service receive: one copy of FIREMEN magazine monthly, the NFPA **Quarterly,** the monthly **News Letter,** technical standards, popular bulletins and posters.

All associate members have one vote in Association affairs.

New members of the Volunteer Fire Company Section are:

UNITED STATES

Alpine Volunteer Fire Dept., Alpine, Texas
Ashburn Volunteer Fire Dept., Ashburn, Va.
Athens Volunteer Fire Dept., Athens, Texas
Bellaire Volunteer Fire Dept., Bellaire, Texas
Buchanan Fire Dept., Buchanan, Mich.
East Franklin Township Volunteer Fire Dept., New Brunswick, N. J.
Plainview Fire Dept., Plainview, Texas
Signal Depot Fire Dept., Decatur, Ill.

CANADA

Bruck Silk Mills, Ltd., Cowansville, P. Q.

Montgomery, W. Va. . . .

FIRE Chief Roger W. Nowviskie, of the fire department of Montgomery, W. Va., recently enrolled in the NFPA, reports that his department is the third oldest in the state, having been organized in 1880. The department has two pumpers and a 1,500-gallon tank truck, and rescue squad equipment includes a Milliken portable iron lung, an E & J resuscitator, and an H & H inhalator.

The chief and captain are full-time employees. Other firemen receive $3 per alarm. A member of the city council is chairman of the department so that the council may have direct contact with the fire department organization.

Cordova, Alaska . . .

THE volunteer fire department of Cordova, Alaska, a member of the NFPA Volunteer Fire Company Section, has an interesting arrangement for paying volunteers. Each man is paid $2 per drill and $5 per fire by the town council. However, if water is not turned on from a hydrant, the alarm is considered as a drill and is paid at the $2 rate. This may be one means of making certain that the hydrant line will be used where required.

VALUE . . .

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Because these men have learned through practical experience HALE VALUE in terms of:

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Note the durability, flexibility. Reinforced at every point of strain and wear. Made for protection, comfort, and long wear.

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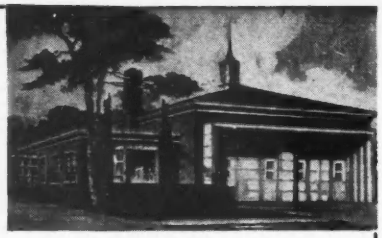

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STOP Fire!

SAVE VALUABLE PLANTS & MATERIALS

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"MASTER-LIGHT MAKERS"
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MANUFACTURERS' ANNOUNCEMENTS

Device Aids Drafting of Water for Pumpers

A device which should be of considerable interest to fire departments which are called upon to take suction from rivers, brooks, and ponds has recently been put on the market by The Sheren Fire Equipment Co. The device is a new type of suction strainer cleverly designed to prevent the entrance of sand and weeds into the suction hose, thus reducing the danger of damage to pumps, hose, and nozzles. Known as the "Filter-Flo," the device is essentially a hollow aluminum hemisphere or bowl approximately three times the diameter of the suction hose which is threaded onto the end of the suction hose by means of an integral frame. Because of its design, the "Filter-Flo" screens the water twice before it enters the suction hose, meanwhile keeping the end of the hose elevated several inches above the bottom of the water supply regardless of position. According to the manufacturer, it permits drafting in much shallower water without developing air funnel than is possible with conventional strainers, and when in a vertical position, it takes water only from the cleanest part of the stream. For full information about the "Filter-Flo" write to the manufacturer at 211 Park St., Mason, Mich.

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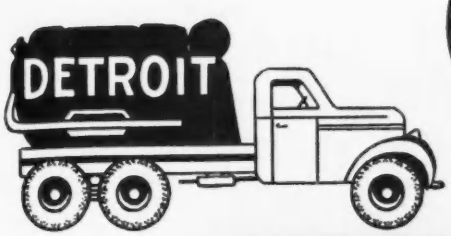

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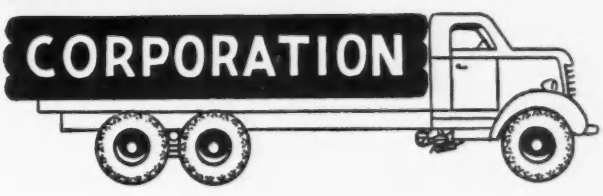

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Automatic Locking for Truck Axles

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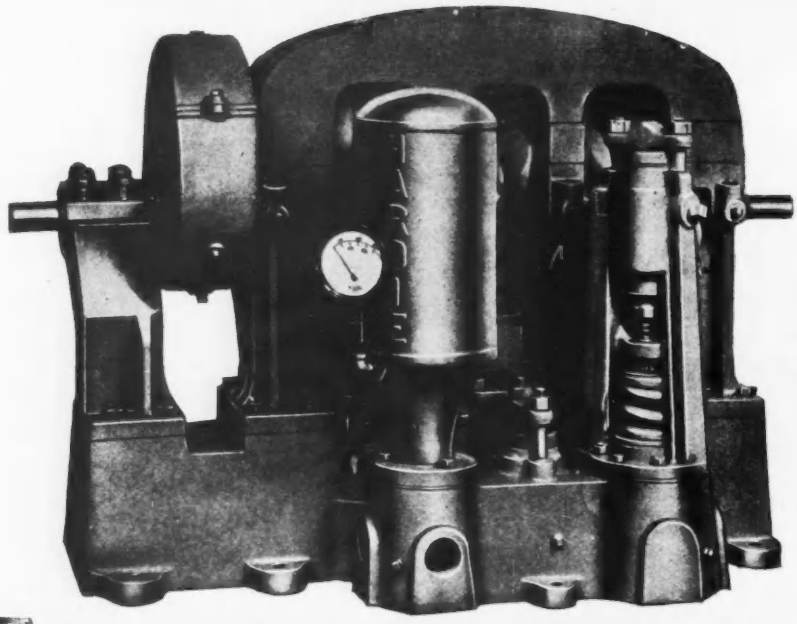
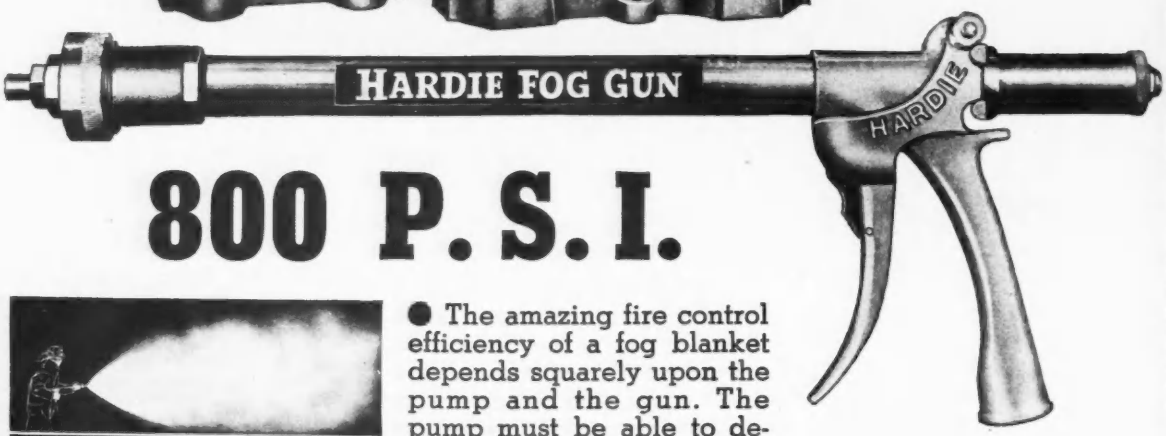
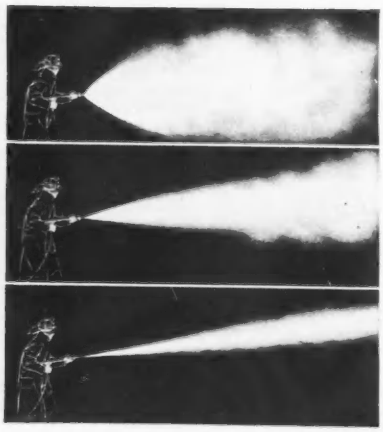


The Hardie is a big, strong vertical crankshaft driven pump built for sustained high pressure. The Hardie Imperial LCXA (at left) delivers 60 gallons per minute at 800 P. S. I. The Hardie Imperial XCXX delivers 35 gallons per minute at 800 P. S. I.



800 P. S. I.



● The amazing fire control efficiency of a fog blanket depends squarely upon the pump and the gun. The pump must be able to deliver 800 P.S.I. at the nozzle for long sustained periods. The gun must be properly engineered and constructed to produce a true fog—or an intermediate spray, or a hard driving stream — whatever the situation calls for, instantly, when needed.

Because Hardie pumps and guns meet these requirements easily and completely they are standard equipment in Fog Fire Trucks of leading fire control equipment builders and are specified for modernization of old style trucks. Write for specification data.

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FREDDIE FIREMAN SAYS:

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And hard to fight
You'll be glad you saved your strength
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The very latest development in hose couplings, nozzles and other equipment. Amazingly light in weight — and absolutely comparable to brass in service use. Easier to handle. An outstanding Akron Brass contribution to greater fire fighting efficiency.

This *new* Akr-O-Lite Rocker Ring Coupling weighs only 2 pounds—4 pounds lighter than brass coupling.

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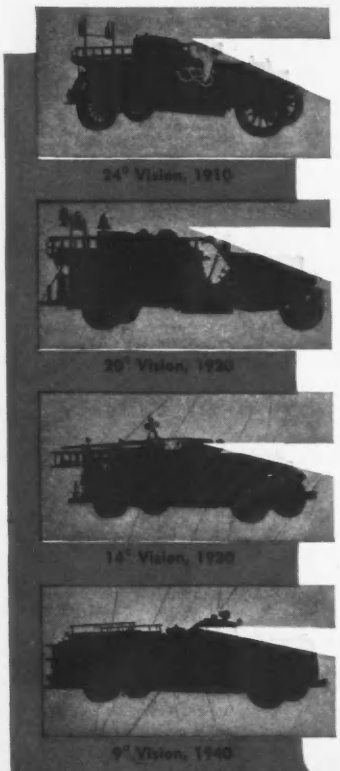

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